The Capitol Hill Monitor

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THE END IS NEAR

by Alan Henney (henney@doubled.com)

Well, at least the end of the millennium is! So you're already planning to monitor the routine police and fire channels this New Year's Eve, right? But what about those obscure emergency networks? With the end of the year approaching, we may hear some of the area's seldom-used emergency network frequencies come to life, just maybe.

Like an approaching hurricane (but hopefully not as devastating), emergency managers have had advance warning to establish command centers for this occasion... and there's no doubt when this storm is coming ashore!

Hopefully many of the armchair warriors will volunteer to work and man the radios so we can finally hear some activity on these often-quiet frequencies (assuming we don't lose power!).

Here are some frequencies to consider as you craft your final scanner list for the century. Keep in mind the usual police and fire channels that are commonly used during celebrations like the 4th of July. For D.C., see the visitor's guide (http://www.hyattsvillevfd.org/chm/guide.htm).

You may also wish to monitor emergency radio groups such as REACT (often 462.675), ARES, MARS, RACES, Skywarn and others. Check out the T-MARC webpage (http://www.t-marc.org/) for the latest list of coordinated ham repeaters.

The 47 MHz state highway channels, covered in most every scanner directory, may be worth monitoring (contact Alan if you need a list). Try 47.42 and 47.62 for Red Cross chapters that may be on standby.

Don't forget the deluge of local, regional, state and national mutual aid channels. We're finally starting to hear some action on the 800 MHz channels. Mutual aid channels used in this area include, fire (NoVA 154.265, Metro DC 154.28 and 154.295), police (Metro DC 453.55/866.3625, Md 39.1 and 155.475, Va 39.54), National (Calling 866.0125, Tac 1 866.5125, Tac 2 867.0125, Tac 3 867.5125, Tac 4 868.0125) and DC COG:

1 - 868.5125
2 - 866.8375
3 - 867.2375
4 - 867.4875
5 - 866.8625
6 - 867.7625

Y2K Frequencies

27.2750s	[ ]	Baltimore City Civil Defense
37.5800s	[412]	PEPCO Generating Station Emergency Net
44.7400s	[110.9]	MSP Civil Defense Net (medevac also)
44.9000s	[110.9]	MSP Nuclear Power Plant Emergency Net
45.5600s	[151.4]	D.C. Mayor's Cmd Ctr Ch. 2 (see note)
45.6000s	[151.4]	D.C. Mayor's Cmd Ctr Ch. 1 (see note)
47.5000s	[ ]	Maryland Emergency Management Agency (see note)
47.6200s	[ ]	P.G. Emer Prep "F4" X.25 Packet Data
143.0400s	[None]	Maryland EOC Net
153.4400s	[ ]	BGE Nuclear Power Plant Emer Net
155.3400s	[ ]	Richmond Hospital Emer Net
155.8200s	[91.5]	Va EOC Alternate
155.8950r	[91.5]	Va EOC Primary
155.9400r	[100.0]	P.G. Emer Prep F2: Shared Gov't
158.9250r	[141.3]	Baltimore City Civil Defense
158.9400s	[100.0]	P.G. Emer Prep F1: Admin
161.0000r	[MANY]	D.C. National Guard
161.7600s	[ ]	Richmond area EAS
161.7900s	[ ]	Baltimore City Civil Defense
166.2500s	[ ]	Calvert Cliffs EAS

167.9750d	[ ]	FEMA (see note)
170.1500s	[ ]	D.C. EAS (Frederick/ Calvert Cliffs too)
171.1875d	[ ]	FEMA (see note)
455.7500s	[ ]	Baltimore Area EAS
462.4000r	[77.0]	D.C. Hospital Emer Net
855.2125r	[136.5]	D.C. Mayor's Cmd Ctr Ops. 3 (see note)
855.2375r	[136.5]	D.C. Mayor's Cmd Ctr Ops. 2 (see note)
855.4625r	[136.5]	D.C. Mayor's Cmd Ctr Ops. 1 (see note)
868.5125r	[156.7]	Mont Co Hospital Emer Net/DC Metro RINS

Now, some notes....

Through a cooperative agreement, MSP allows MIEMSS (the EMS medevac helicopter system) to use 44.74, the MSP Civil Defense Network. 47.5 is a licensed but unused backup for 47.66, MIEMSS's "heli-med" channel. To complicate matters, the Maryland Emergency Management Agency (MEMA) also licensed 47.5 years ago (it appears to be a link between the state's EOC and the Frederick County EOC). If anyone knows why just Frederick County, please let the rest of us know!

All EOCs in Maryland purportedly have access to 143.04. Two other frequencies, 141.06 and 143.5, have both been reported as alternates. But all three frequencies, just below the 2-meter ham band, appear as "black holes" in federal and FCC databases (anyone know why?).

Virginia's Department of Emergency Services (ES), with its primary headquarters at the Virginia EOC near Richmond, is the state's "civil defense" agency (see article in this issue's NewsScan). 155.82 and 155.895 are the primary channels used by ES for administrative and emergency communication mostly in the Richmond area. The Virginia Health Department also coordinates statewide activities on 155.82 and 155.895 with ES personnel. The Virginia EOC commonly coordinates EMS communication for Richmond area paramedics, medevac aircraft and medical facilities. Has anyone heard the Virginia National and State Guard? Please try 148.65 and 148.775 and let us know.

At last listen, the District's Mayor's Command Center was the net control for the Washington area Emergency Alerting System (or EBS as it was once called) on 170.15. Other area EAS users include Montgomery County ECC, National Weather Service, WKYS, WMAL, WTOP and WWRC. The Frederick County EOC also uses 170.15 with WFRE and WFMD. 161.76 is reported as a secondary EAS channel for Washington (but don't hold your breath waiting to hear it used). Both Baltimore County and the Maryland state EOC claim 455.75 as their EAS channel. A new state EOC for Maryland, by the way, is expected to be operational by mid-November, just in time for Y2K!

One of my personal favorite mysteries is/was the FEMA Civil Defense Warning Radio Circuit (Channel G). Channel G was the radio back-up to what's now called the Washington Area Communications Circuit (WACC). WACC is a system of dedicated landlines routinely used by area EOCs and 9-1-1 centers to share emergency information. WACC is the local version of the National Warning System (NAWAS) which was originally intended to warn of impending nuclear attack. The local WACC circuit is now routinely used for more mundane notifications such as weather alerts, mutual aid requests and related emergency info.

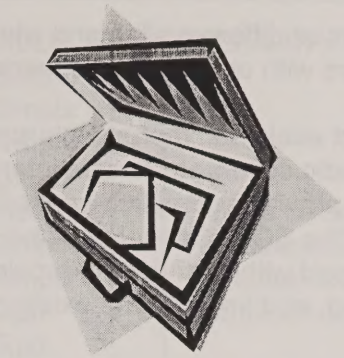
The landline portion of the WACC is known as the GP-2200 (see details regarding the radio portion, Operation SECURE, below). The GP-2200 operates much like the old-fashioned partyline where everybody who is connected can listen and is often used in lieu of a mutual aid channel such as 154.28 or 453.55. Each region has a local command center (in our case the District's Mayor's Command Center) that's charged with monitoring the national circuit and passing along pertinent information onto the local circuit (the WACC/GP-2200 in our case). Similar mini-NAWAS networks operate in each state or region.

An HF SSB net known as Operation SECURE is the radio backup for WACC. Prior to this HF net, FEMA employed a local VHF system nicknamed "Channel G." Stations that used the Channel G duplex radio circuit talked to FEMA on 167.975 and heard back from FEMA on 171.1875. FEMA tested this radio circuit on a daily basis years ago, then net control for WACC transferred to the District, and that was the last we heard of Channel G. FEMA reportedly remotely activated the old air raid sirens on 171.1875. Anyone know what happened to these two frequencies? They were at least partially replaced by Operation SECURE.

Speaking of FEMA, we've seen a hoard of frequencies reportedly used by FEMA's local offices over the years, but have had no confirmations in recent times. If anyone wants to look for FEMA, try these: 138.225, 138.575, 139.45, 139.825, 139.95, 140.025, 140.9, 140.925, 141.725, 141.875, 141.95, 142.375, 142.4, 142.425, 142.925, 142.975, 143.0, 143.25 and 143.625. Don't be surprised if you hear the military instead of FEMA because many of these channels are not exclusive FEMA allocations. FEMA's CTCSS is 118.8 (or so we're told).

On the local level, Baltimore City emergency managers may now take to the city's new digital trunked system. But their licensed frequencies include several listed above (are they still used?). 158.925 is also used by the jail. In Prince George's County, emergency preparedness personnel now routinely share 158.94 with other county agencies who have been hard pressed for more talk channels. Often a popular alternate for the Red Cross, 47.62 was intended for X.25 packet transfer by P.G.'s emergency managers, but has anyone heard it used?

So far, the District's Mayor's Command Center appears to be the sole user of the city's only multi-agency trunked system. It's primary talkgroup on the Motorola Type II system is 08304 (207 hex). No word yet as to the status of their old 45 MHz channels. The three 855 MHz trunked channels are also available for use as conventional repeater pairs. Here are the trunked frequencies for those with trunk capability: 855.2125, 855.2375, 855.4625, 856.9875, 857.9875, 858.9875, 859.9875 and 860.9875.



When planning your Y2K survival kit, don't forget a pen and paper so you can take notes of what you hear and share them with the rest of us. We especially appreciate CTCSS tones and confirmations that the nets are still used, and any others that we may have omitted.

DC POLICE SEEK DIGITAL UPGRADE

The Metropolitan Police Department demonstrated its commitment to upgrading to a digital radio network when it issued a detailed solicitation this summer. The department seeks to upgrade and modernize its 20-year-old UHF radio system from a 25 KHz analog system to a narrowband 12.5 KHz digital system. "Digital communications systems," the solicitation states, "are more robust and secure than their analog counterpart, and, in the future, more bandwidth-efficient."

The existing UHF radio system consists of 13 frequency pairs that transmit from base stations on seven radio towers within the city. In addition, underground transmitters are in 18 subway stations as well as in the I-395 tunnel near 3rd and C Streets NW. MPD has 33 remote receiver sites in all.

The solicitation mandates a TIA-102-compliant digital radio system. The Telecommunications Industry Association TIA-102 specifications are derived from the digital audio part of APCO Project 25. APCO Project 25 is a standard for public safety communication systems created by the Association of Public-Safety Communications Officials.

All existing VHF and UHF frequency pairs will be retained but modernized. The contractor will be required to relocate and possibly redistribute the 13 UHF channels so as to place backup and main

transmitters at different sites and where they will not interfere with other radio frequencies.

The project seeks to: improve interoperability, improve radio coverage, reduce inter-modulation problems, provide encryption-capability on all channels (the SOD channel must be capable and equipped with encryption), provide over-the-air rekeying, and improve the existing VHF radio system.

The existing VHF Citywide-1 channel (159.15) will simulcast the future digital Citywide-1. Fire/EMS and MPD dispatch consoles will be required to have access to each agency's channels for patching purposes.

The solicitation, says Darryl Strucko of Mitretek Systems, has been placed on hold until funding from the Office of the Chief Technology Officer (OCTO) has been approved. "We hope," Strucko adds, "that a formal release for bids will occur by December or January, but this is dependent on OCTO."

The 87-page solicitation contains extensive detail and valuable information, such as current frequency usage, transmitter and receiver sites and coverage requirements for each channel. For a copy of the file in Adobe (PDF) format contact Alan. Thanks to Ray Chin and Vincent Destajo for keeping us posted on this project.

SCANNING AREA PIPELINES

By Alan Henney (henney@doubled.com)

The Washington-Baltimore area has been blessed with more than its share of pipeline companies that serve the east coast. Here are the frequencies. If we forgot any pipeline, please let us know. We especially need CTCSS/DCS tones.

ANNAPOLIS PIPELINE INC (HARWOOD)

152.9150	Smplx	[ ]	

COLONIAL PIPELINE CO

454.0000	Rptr	[ ]	Temporary/ Portable Repeater
464.5000	Smplx	[ ]	Mobiles
464.5500	Smplx	[ ]	Mobiles
469.5000	Smplx	[ ]	Mobiles
469.5500	Smplx	[ ]	Mobiles

Colonial owns the world's largest-volume refined liquid petroleum products pipeline. The Atlanta, Ga., based company operates more than 5,349 miles of underground pipeline that delivers a daily average of 80 million gallons of gasoline, kerosene, home heating oil, diesel fuel and national defense fuel to 267 marketing terminals in 12 states and the District of Columbia from Gulf Coast refineries.

COLUMBIA GAS TRANSMISSION CORP
(Columbia Energy Group)

33.3800	Smplx	[167.9]	Pipeline Systemwide
451.6000	Smplx	[ ]	Cove Point Plant (portables)
451.7000	Smplx	[ ]	Cove Point and Arcola Plants (portables)
456.6000	Smplx	[ ]	Cove Point Plant (portables)
456.7000	Smplx	[ ]	Cove Point Plant (portables)
457.5250	Smplx	[ ]	Cove Point Plant (marine radio)
457.5500	Smplx	[ ]	Cove Point Plant (marine radio)
457.5750	Smplx	[ ]	Cove Point Plant (marine radio)
457.6000	Smplx	[ ]	Cove Point Plant (marine radio)

Columbia's 2,400 employees provide gas transmission and storage services for 72 local distribution companies serving more than 7 million customers, as well as to hundreds of large-volume customers in the eastern half of the country. Columbia's 12,500-mile natural gas pipeline spans across 10 states. Columbia and PEPCO jointly own and operate the liquefied natural gas (LNG) receiving terminal and gas storage facilities at Cove Point, Md, and the underground pipeline that links the facilities to two in-

terstate pipelines in Loudoun County. The Cove Point plant is one of the largest LNG import, storage and peaking facilities in the nation.

Columbia took-over Commonwealth Gas Services which provided propane and natural gas to customers in Loudoun and Prince William counties. Commonwealth operated on a Nextel trunked system (851.9375, 854.6375, 854.8125, 856.6125, 856.9125, 857.9125, 860.7875, 861.8875, 862.8875, 863.8875, 864.3125, 864.8875, 865.3125 and 865.8875). Anyone hear them still?

PLANTATION PIPE LINE COMPANY

49.1600	Smplx	[ ]	Richmond-Newington Sites
451.7500	Rptr	[ ]	Richmond-Newington Sites

The Plantation system consists of approximately 3,100 miles of pipelines connected to 130 shipper terminals in eight states. Refined petroleum products - including different grades of motor and aviation gasoline, commercial and military jet fuels, heating oil and diesel fuels - enter the pipeline from nine refineries in Mississippi and Louisiana, from other products pipeline systems, and via marine facilities on the Mississippi River. The company, headquartered in Atlanta, Ga., was founded in 1940.

TRANSCONTINENTAL "TRANSCO" GAS PIPE LINE CORP (Williams Gas Pipeline)

48.7400	Smplx	[ ]	Pipeline Systemwide
173.3375	Telem	[ ]	Systemwide (2w port)

The majority of Transco's 1,800-mile mainline system consists of four parallel pipelines, totaling 10,274 miles. The supply originates at the Gulf coast and the market areas receiving it are the eastern and southeastern states. Approximately 8 percent of all natural gas consumed in the country is delivered through the Transco system. Transco successfully constructed the longest natural gas pipeline in the world in 1950, stretching from Hidalgo County, Tx, in the Rio Grande Valley, to 134th Street in New York City.

PETROLEUM/OIL SPILL CLEAN-UP

25.0400	Smplx	[ ]	FM
25.0800	Smplx	[ ]	FM
36.2500	Smplx	[ ]	
41.7100	Smplx	[ ]	
150.9800	Rptr	[ ]	Simplex Also
154.5850	Smplx	[ ]	Portable/Mobile Only
158.4450	Smplx	[ ]	Portable/Mobile Only
159.4800	Rptr	[ ]	Simplex Also
454.0000	Rptr	[ ]	

These frequencies are licensed by numerous companies and agencies for use during petroleum-related emergencies (the 150 MHz channels are the most common). Licensed users in this area include the Marine Spill Response Corp (Herndon), Tri-County Industries Inc (Beltsville) and Virginia's Department of Emergency Services.

Y2K FORCES P.G.'S MOVE

The move to Prince George's County's new communications facility has been delayed several times in the past year. Because the existing CAD system is not Y2K-compliant, however, the move must be completed by year's end. All leave requests by the police and fire departments have been canceled between December 26 through January 3.

The new center is in a new edition of the same building that houses the current facility on Anchor Street in Landover. Call-takers, police and fire dispatchers will be training on the new Windows NT-based CAD system. The dispatchers are also learning a computerized system to control the radio channels. The new facility will continue to use the county's existing frequencies, but the capability to migrate to a new radio system is available. That will be a future project.

Dispatch sections for police and fire will be on opposite sides of the same large room. Call-takers will work from a separate room and the only means of contact is through an intercom. Right now the police shout across the room and those on the fire side often walk over to an adjacent room to question a call taker.

NEW EAGLE FOR PARK POLICE

For those who have not already noticed, Spencer Stevenson reports that the US Park Police added a third Eagle helicopter this past summer. The new helicopter is Eagle 1. The old Eagle 1 is now Eagle 2, and the old Eagle 2 is now Eagle 3. Here are the specifications for the three helicopters:

Eagle 1 - N22PP -
1998 Bell 412EP (new twin-engine)
Eagle 2 - N412PP -
1990 Bell 412SP (old twin-engine)
Eagle 3 - N33PP -
1983 Bell 206L-3 (single-engine Long Ranger III)

NEW FREQS FOR FREDERICK COUNTY, MD

The Frederick County detention center appears to have left 460.125. Larry Cordell says the changes may have taken place after a recent renovation. Larry has confirmed activity on at least one of the facility's two new repeater channels, 490.2625 and 490.4125.

The county's cable TV provider, GS Communications, also appears to have left 151.715 for 452.2. GS Communications is owned by the same company that owns the Frederick News Post which is licensed on 151.865.

THE SCANNER DIGEST

An old friend reincarnated?

Scanner hobbyists have seen numerous changes as far as newsletters go during the past few years. Many of us long for the witty and informative columns that once appeared in Les Mattson's Northeast Scanning News (NESN). For more than a year now, the Scanner Digest has been providing valuable information for the die-hard scanner enthusiast in a style reminiscent of the old NESN. The staff consists of former NESNers and established scanists such as Louis Campagna, Jack McCartan, Peter Szerlag, Roger West and others.

The 50-page newsletter comes out every other month and primarily covers the northeast states with sharp and clear print. Subscriptions are $22 for six issues (calendar year). The Scanner Digest newsletter is offering a complimentary sample issue to all members of recognized radio scanner hobbyist groups, lists, clubs and related organizations. The Scanner Digest will provide the last two issues of the newsletter for $1 to cover postage (make payment out to: "Scanner Digest")! For details contact the Scanner Digest, PO Box 207, Jamison, PA 18929-0207 or e-mail ScannerDigest@usa.net

NEWSSCAN

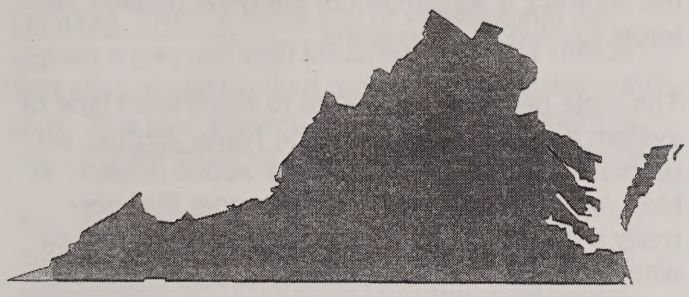
DC FIRE/EMS TRUNKED SYSTEM ONLINE SOON? Responding to his critics, District Fire Chief Donald Edwards promised improvements to the department's equipment, facilities and technology, which he said were shortchanged by the city during the fiscal crisis of the early 1990s. Among the items mentioned in the Oct. 22 *Washington Post*, was the new trunked radio system. The chief said it is operational and should be in use within the next 60 days [end of December].

The chief provided a written response to 26 questions raised by a council member concerning the department's truck maintenance program, emergency radios, ambulance squads and other agency matters. In the chief's response, he details a number of areas in which there are improvements but acknowledged that several of his initiatives are behind schedule, such as a new radio system, which was supposed to be in place by July.

A broken radio was blamed in part for the death of a firefighter in October 1997, and the report issued after the death recommended many improvements in department communications equipment and other safety measures. Edwards attributed the delay of the new radio system in part to a leaking roof at the communications building where the new equipment will be housed.

Editor's note: As of this writing, the main issue with the new trunked system is finishing reinforcement of the Hughes tower (behind the 4th District police station) for the antenna system. Delays could be

introduced by non-radio factors as well (such as leaking roofs). System testing is in progress even though the final antenna installation is not complete.



THE COMMONWEALTH OF VIRGINIA

JOINT PROJECT MAY MEAN NEW VA EOC. The Virginia EOC and VSP headquarters, both claiming to have outgrown their existing buildings, have partnered on a design concept for a new joint facility. The proposed three-story facility would be constructed next to the current VSP headquarters facing Midlothian Turnpike and its entire lower floor (below ground) would be devoted to the VEOC.

An article in the Virginia Department of Emergency Services Emergency Management Update newsletter said the new facility would have 17,000 square feet of space and could conceivably accommodate state and federal teams working side by side in an augmented scenario. The existing VEOC consists of about 2,700 "usable" square feet where 12 people work each day. During a crisis, the number could increase to as many as 150 workers who must conduct split operations due to space constraints.

The new facility would include improved parking with an area designated for FEMA's Mobile Emergency Response System, a media area with satellite hookups and improved communications.

The initial design phase was approved by the governor and general assembly, but the project still must obtain construction funds, among other approvals. The VEOC was originally constructed as a bomb shelter for the governor in the mid-1950's but converted to an EOC in the 1970's.

WORCESTER, WICOMICO COUNTIES WORKING ON TRUNKING. Motorola and Ericsson/GE are providing estimates to Worcester County for a trunked radio system, reports the Ocean City Today. But the county is also considering piggybacking on Ocean City's existing EDACS trunked system. The county sheriff and fire/EMS officials are already testing talkgroups on Ocean City's system. Sharing with Ocean City would reduce the need for another tower in the county's north end. Ocean City has its primary site in Ocean Pines. The county received a license for 10 channels for testing purposes, 855.9625, 856.4625, 857.4625, 857.7125, 858.4625, 858.7125, 859.4625, 859.7125, 860.4625 and 860.7125.

Meanwhile, Bill Zittle reports that Wicomico County has its analog trunked system operational. The switch-over is anticipated sometime during November. The county's new EOC should be finished soon (if not all ready) and the final tower is up. Antenna sites are licensed in Quantico, Salisbury and Pittsville. The county holds a license for five trunked channels: 857.9875, 858.2375, 858.9875, 859.2375 and 860.2375; and three conventional channels: 856.7125, 856.9625 and 856.9875.

FCC GIVES GREEN LIGHT TO INTELLIGENT TRANSPORTATION SYSTEMS. In October the FCC made radio spectrum available for intelligent transportation systems (ITS) operations. The FCC, states a DOT press release, allocated a range of 5850-5925 MHz for dedicated short range communications (DSRC) between vehicles and electronic systems on the roadside, such as at toll booths or intersections.

This can support ITS activities such as intersection collision avoidance; transit or emergency vehicle signal priority, which allows an ambulance to command a green light approaching an intersection; electronic parking payments; and commercial vehicle clearance and safety inspections that can be done at highway speeds instead of requiring trucks to pull off the road.

DELDOT PURCHASES BROADCAST STATION. The Delaware Department of Transportation is paying $280,000 for WAMS (AM 1380) - a 500-watt classical music station - to advise motorists and residents of traffic conditions in New Castle County, the state's northern-most county. It is part of what is called an Intelligent Transportation Man-

agement plan, states the Sept. 14 Delaware State News. DelDOT has been considering the idea of replacing or supplementing its eight 10-watt AM transmitters with a full-power radio station able to reach from south Philadelphia to central Delaware.

The station was a pre-programmed classical station with no disc jockeys. The station would be the latest addition to the department's high-tech traffic management system, which includes Internet cameras and electronic message boards. If the project goes as planned, DelDOT will become the first state highway department in the country with that kind of broadcast power.

DELAWARE'S AILING TRUNKED SYSTEM. Articles appearing throughout the summer in Delaware papers hammered away at the state's new and ailing trunked radio network. During September, state lawmakers announced they will launch a formal probe into why the new emergency communications system has widespread problems.

The $52 million 800 MHz system was designed to allow firefighters and police officers to communicate from any outdoor location in the state. According to news reports, the system was never designed to work inside large buildings, a fact that angered many legislators who voted for the network. In a letter to the editor that appeared in the Delaware State News Sunday, the governor claimed that public safety radio users in the past, especially in large buildings, relied on talk-around channels where those inside communicated directly by radio to someone immediately outside who could relay the message to a dispatcher if necessary. This approach, the governor wrote, "had worked effectively for many years."

Furthermore, the governor's letter continued, "Earlier this year, some in our state - apparently at the prodding of Motorola - wanted to pour millions of additional dollars into this new system to 'fix' coverage problems in the five areas and also achieve total in-building coverage. But Motorola hasn't fully determined the cause of the current coverage problems and can't guarantee 100 percent in-building coverage, even if new towers are built."

Motorola claimed the state knew it was getting a system that worked outside and was only guaranteed to provide 95 percent coverage of the state. State officials say the test was flawed. The test set up grids in every county made up of quarter-mile squares. A square passed if a special radio picked up a signal on any 40-foot section of street in the grid and if a voice could be heard. Under the contract, if 95 percent of the grids passed, Motorola fulfilled its obligations.

The state never hired anyone to study what type of system it needed, observed the News Journal, an unusual decision for such an ambitious project. A Motorola spokesperson told the paper that normally a public agency hires a consultant to decide what kind of network it needs.

Baltimore, which also recently installed an 866 MHz system, observed the News Journal, has 10 towers for its 90 square miles. Delaware has 10 towers for 2,000 square miles, but unlike Baltimore, Delaware has few high-rise buildings.

The bid work and construction of the towers to support the project continued despite repeated questions raised before the FCC dating back to Dec. 26, 1996, reported the Delaware State News. The system encroaches as much as 50 miles into the state of Maryland and the adjacent public safety review committee had asked the commission to halt the project three years ago. It didn't and the state continued building the system.

Once completed several months ago, five areas in Delaware experienced outdoor coverage troubles after the 10 planned sites were operating. To fix the problem, Motorola proposed a series of "intelli-repeaters" and channel locking systems which keep radios honed-in on their local signals. Motorola agreed to give the state the "intelli-repeaters" to try to eliminate the outdoor dead spots (but in-building coverage will be another project).

The first of the five areas to see improvement was Rehoboth Beach where a five-channel trunking "intelli-repeater" system was operating just before Labor Day weekend. An "intelli-repeater" site in Hartly (just east of Queen Anne's County) was operating by mid-September. But proposed "intelli-repeaters" needed to fix the other outdoor problem areas have been delayed because new frequencies needed to repair the system are unavailable because they are being claimed by other jurisdictions.

The governor said it is unfair to blame the system's troubles on him because his administration inherited the project from the former governor.

PHILADELPHIA ORDERS MOTOROLA 800 MHZ DIGITAL TRUNK. The city of Philadelphia has signed a contract with Motorola for a $51 million 800 MHz digital trunked radio communications system. The new system, reports the PR Newswire, will be used by all city agencies and departments.

The Project 25-compliant system will include two 15-channel communications systems positioned side-by-side and connected through a Motorola SmartZone switch. The switch will manage all communications traffic on the system, automatically passing communications from one system site to another as users travel throughout the city. The system includes 10 sites and can operate either in digital or analog mode.

The system also is equipped for digital-encrypted voice communications using the standard encryption format, DES-OFB. System dispatchers will manage communications through Motorola software-based Centracom Elite consoles. Once the infrastructure is installed, Motorola will supply the police and fire departments with about 4,885 Motorola Astro XTS-3000 portable radios and 1,800 Astro Spectra mobile radios.

WIRELESS IP NET FOR PENNSYLVANIA. Pennsylvania finalized a contract with M/A-COM's OpenSky for a statewide public safety communications system. According to a company press release, M/A-COM's OpenSky wireless IP (Internet Protocol) network infrastructure will consist of several hundred base stations along with regional control centers and network control centers. The base stations, which provide a voice and data interface between mobile or portable radios and dispatch centers, are the backbone of a radio system which will provide the capability of tying statewide agencies and others into a single network.

State agencies anticipated to use the system will include public safety, environmental protection and transportation. Other potential users include local law enforcement, fire and EMS providers. This will purportedly be the first statewide, multi-agency, fully digital voice and data communications system in the country. OpenSky claims its IP backbone carries all voice messages in a compressed and encrypted format. For poor coverage areas, OpenSky's Vehicular Repeater brings network connectivity to the most remote areas when needed. The statewide system is slated for final completion in 2001.

BELL ATLANTIC ROAD WARRIORS? A handful of Bell Atlantic Mobile (BAM) system performance engineers drive around with more than $200,000 worth of cellular phones and computers. They drive specially equipped late model Ford Taurus vehicles covered with antennas and tinted glass. The vehicles cover 1,000 miles or more each week, from Maine to Georgia, just to monitor BAM's wireless network and those of its competitors. The equipment, states a Bell Atlantic company newsletter, gathers such data as the percentage of dropped calls, signal strength and dead spots in BAM's and competitors' networks.

On-the-road testing enables BAM to directly compare its performance against the competition in real-world conditions. The data gathered helps BAM decide how to invest the nearly three-quarters of a billion dollars it will use to improve its network this year. BAM claims its test results show the company has the edge over the other providers in nearly every measurement.

BAM uses the Ford Taurus as a test vehicle to simulate as closely as possible the conditions faced by most customers. Since most people still drive cars, the Taurus is used because it is one of the most common cars on American roads.

Typically a half dozen conversations are going on simultaneously while the Taurus is moving. Seven wireless phones in the car, on various cellular networks, continually dial a computer connected to a landline phone and "talk" for about 2 minutes and 15 seconds -- the average length of a customer call. An eavesdropper would hear a series of odd, unrelated sentences such as "The cigar burned a hole in the rug," or "These days, a chicken leg is a rare dish." Eight specific sentences -- four in a male voice and four in a female voice -- have been recorded for their variations in syllables, speech rate and audio range.

A computerized voice constantly updates the driver on what's happening with the equipment. Two laptop computers perched on a custom deck in the passenger-seat area tell the driver about the performance of each phone -- the strength of the signal and how many calls were completed or dropped. The other PC provides information about BAM's CDPD (cellular digital packet data) service, noting how many packets of data are being carried and whether any are dropped.

WIRELESS 9-1-1 PHONE. With the Magnavox Mobile911 phone, calling 9-1-1 is simple -- because that's all it does! It runs on four AAA batteries and features an ear-splitting 95-decibel emergency alarm. The only cost is the initial price of $199. http://www.mobile911.com/all_about/

David Doernberg, Scott Glazer, John Korman, Jack McCartan and Earl Suitor contributed to this issue's NewsScan.

Please address all correspondence to Alan. We encourage readers to submit material and write articles that relate to the hobby. All submissions are subject to editing for style and content. When submitting material please make certain we can contact you should we have any questions. We welcome frequency and visitor requests, but please include a reply envelope.

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The Capitol Hill Monitor is the non-profit newsletter of the *Capitol Hill Monitors*. The newsletter keeps scanner enthusiasts abreast of local meetings, frequency profiles and other topics of interest. Dues are $10 and include 12 issues (back issues cost $1 each). Kindly make checks payable to Alan Henney. Membership will be prorated accordingly in the event of a postage increase.

Join Local Scanner Enthusiasts On-Line!
We encourage computer users to take part in discussions on Frank Carson's Open Channel computer BBS (301-203-8478) or subscribe to the Scan-DC listserv by sending an e-mail to majordomo@qth.net with the words "subscribe scan-dc" (no quotes) as the message.

* * *

Table C-1. FCC Channel Information

Channel	Xmit Freq. (MHz)	Output Power (W)	ERP Authorized (W)	Ground Elev. (ft)	Ant. Ht. To Tip (ft)	Antenna Lat.	Antenna Long.	Usage	Tower Name	Transmitter Address
1D	460.350	250	1514	160	102	38-51-16	077-00-01	Main	St. E's	2700 MLK Jr. Ave SE
		350	951	190	100	38-56-30	077-00-41	Standby	Park Rd	750 Park Rd. NW
		110	10	40	-30	38-56-30	077-04-47	UG	I-95	300 Block 3rd St. NW
2D	460.250	250	487	288	355	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	400	391	249	38-56-24	077-04-54	Main	WRC	4001 Nebraska Ave. NW
3D	460.025	250	586	288	495	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	1009	170	170	38-54-59	077-02-54	Main	Hilton	1919 Conn. Ave. NW
4D	460.500	250	461	288	480	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		250	461	288	480	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
5D	460.200	250	675	288	490	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	970	170	120	38-55-37	076-58-51	Main	1700	1700 Rhode Isl. Ave. NE
6D	460.150	350	912	280	167	38-51-10	076-58-12	Main	Engine 32	2445 Irving St. SE
		350?	912	280	167	38-51-10	076-58-12	Standby	Engine 32	2445 Irving St. SE
7D	460.475	350	859	280	121	38-51-10	076-58-12	Main	Engine 32	2445 Irving St. SE
		350	859	280	121	38-51-10	076-58-12	Standby	Engine 32	2445 Irving St. SE
TAC-1	460.100	250	586	288	465	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	708	390	200	38-56-24	077-04-54	Main	WRC	4001 Nebraska Ave. NW
TAC-2	460.400	350	1134	280	136	38-51-10	076-58-12	Main	Engine 32	2445 Irving St. SE
		110	10	40	-30	38-56-30	077-04-47	UG	I-95	300 Block 3rd St. NW
		350	991	170	120	38-55-37	076-58-51	Standby	1700	1700 Rhode Isl. Ave. NE
TAC-3	460.450	250	461	288	450	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	517	288	435	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
SOD	460.275	250	554	288	600	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		350	1574	160	102	38-51-16	077-00-01	Standby	St. E's	2700 MLK Jr. Ave SE
Command	460.425	250	369	288	570	38-57-44	077-01-36	Standby	4D	6001 Georgia Ave. NW
		350	431	391	250	38-56-24	077-04-54	Main	WRC	4001 Nebraska Ave. NW
Citywide-1 (UHF)	460.325	250	461	288	675	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		350	574	391	355	38-56-24	077-04-54	Standby	WRC	4001 Nebraska Ave. NW
		110	0	40	-40	38-56-30	077-04-47	UG	I-95	300 Block 3rd St. NW
Citywide-1 (VHF)	X159.150 R155.250	250	304	288	535	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		350	512	190	100	38-56-30	077-00-41	Standby	Park	750 Park Rd. NW
ISB	X158.790 R156.030	250	307	91	25	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		350	774	190	120	38-56-30	077-00-41	Standby	Park	750 Park Rd. NW
		350	22	40	-30	38-56-30	077-04-47	UG	I-95	300 Block 3rd St. NW
CID	X158.850 R156.090	250	353	288	420	38-57-44	077-01-36	Main	4D	6001 Georgia Ave. NW
		350	820	170	100	38-55-37	076-58-51	Standby	1700	1700 Rhode Isl. Ave. NE

The Capitol Hill Monitor

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[redacted]